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From: General Aviation Human Factors Program Manager, AAR-100
To: General Aviation Human Factors TCRG, (POC: Susan Parson, AFS-800)
Subj: ASRS Weather "Callbacks" Execution Plan

Ref: (a) FY05 GA TCRG "ASRS Weather Callbacks" requirement

1. Requirement Background: Most weather-related GA accidents are fatal. General aviation aircraft are generally not equipped with cockpit voice recorders or flight data recorders. These factors naturally make accident investigations into the root causes of these fatalities difficult, if not impossible. The ASRS conducts interviews with pilots who have had close encounters with danger. These pilots are obviously still here to report about what happened. A living witness is superior to a cockpit data recorder in many ways. No recorder can speak to what was going through the pilot's mind before and during a dangerous incident. These interviews, therefore, provide a unique window into the pilot's mind. They grant direct access to decisions made by actual persons who experienced actual weather incidents and lived to tell about it. This type of information is unavailable through other sources. Moreover, the ASRS guarantees anonymity during the "Callback" process. That means the pilot is free to speak candidly about the event without fear of reprisal. This is the best way to maximize the chance of getting reliable, useful information from each interview. There are clearly many ways this information will be useful. One example involves weather reports. Available weather information for pilots continues to improve. But analysis shows that less than half of the pilots involved in fatal weather accidents ever received a formal pre-flight weather briefing. One key to lowering the GA accident rate, therefore, involves determining why pilots do not take advantage of this weather information in managing weather risks.
2. The study's approach will include operational experience and research that can enhance AFS-800's planned "Pilot's Guide to Preflight Planning, Weather Self-Briefings, and Weather Decision Making" document. A first step is to gather operational feedback from pilots who were involved in weather-related incidents. Interviews will be conducted to determine why the incident occurred and how pilots were able to get out of the hazardous situation. Pilot feedback may provide valuable in creating training aids to prevent future weather-related accidents. To avoid duplication, the project will complement and enhance ongoing work to ensure that this project does not result in a separate (and possibly conflicting) weather information for the "Pilot's Guide to Preflight Planning, Weather Self-Briefings, and Weather Decision Making" document.

3. Technical approach will include: NASA ASRS will be the lead contractor with CAMI providing minimal assistance.
 - a) Modify the current Follow-Up Weather Questionnaire Form to reflect EMS Helicopter reports and to reduce the overall number of questions.
 - b) Interview 100 pilots from the ASRS database who submitted a weather related incident.
 - c) Summary report with pilot responses de-identified.
4. Reports:
 - i. Quarterly (June, September, December) research progress status reports:
Informal e-mail reports from the program manager aviation maintenance human factors to General Aviation Human Factors TCRG.
 - ii. Annual Report: Grantee will submit an annual report.
 - iii. Program Review: Grantee will participate in the annual program review.
4. Deliverables:
 - i. Final report describing factors influencing pilot weather decision making.
 - ii. Quarterly research progress reports.
 - iii. Annual report
5. AFS-800 Responsibility
 - Make available personnel and resources to investigator
 - Incorporate project deliverable into the "Pilot's Guide to Preflight Planning, Weather Self-Briefings, and Weather Decision Making" document.
6. Schedule:

Project time line (6 month contract that may be extended another 6 months)

 - Monthly telephone meetings will be conducted between the investigator, AAR-100 representative, and ASY representatives. The purpose of the telephone meetings will be to monitor the project's progress and to obtain sponsor feedback.
 - The researcher will twice present the status of the project to AAR-100 and AFS-800 FITS representatives. Unless directed by AAR-100, primary location of meeting location will be FAA headquarters. Meeting dates planned include: June 2005 (Washington DC) and September 2005 (Washington DC).
 - June, 2004: interim results
 - September, 2005: Deliver final report and de-identified database report.

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